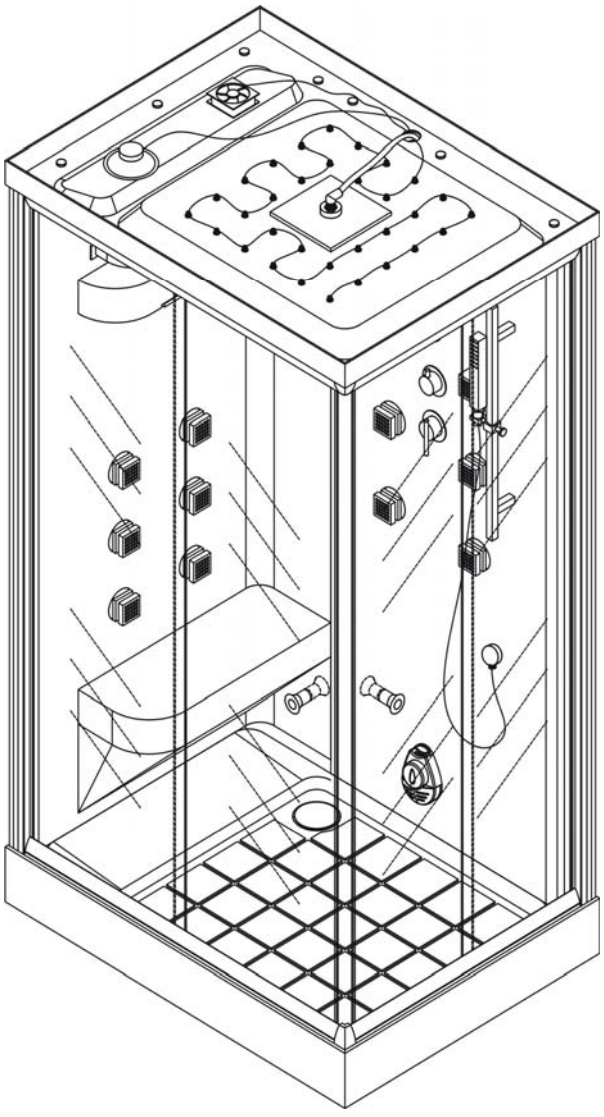
Duchy Ivory

USER'S MANUAL



Warnings

1 . Be careful not to slip down in the unit.

2 . P lease read the instruction before the product is being used. And operate according to the

manual.

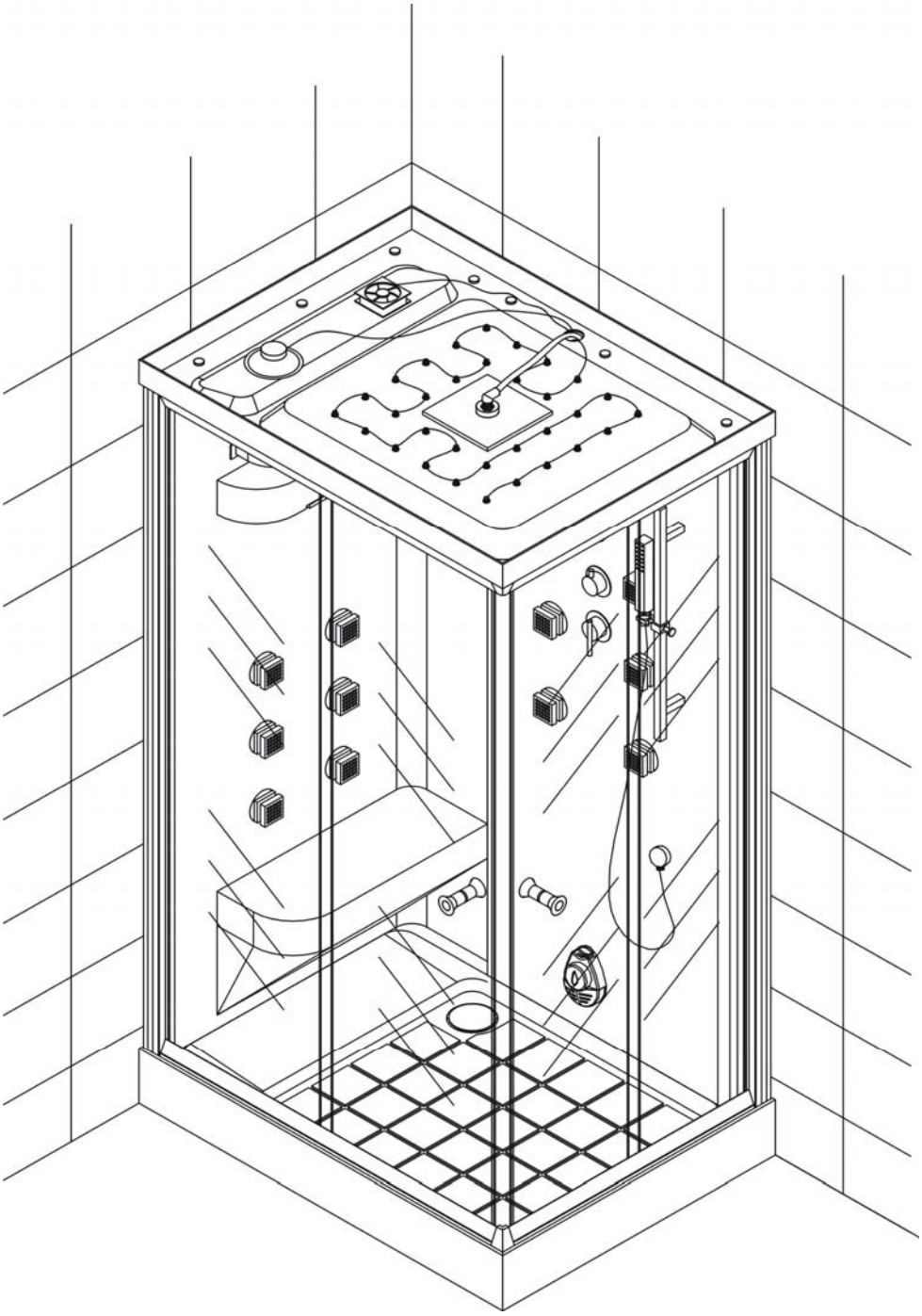
3 . The senior, ament, less-able people and pregnant women do not use this product.

4 . Children can use this product only under the guidance of adults.

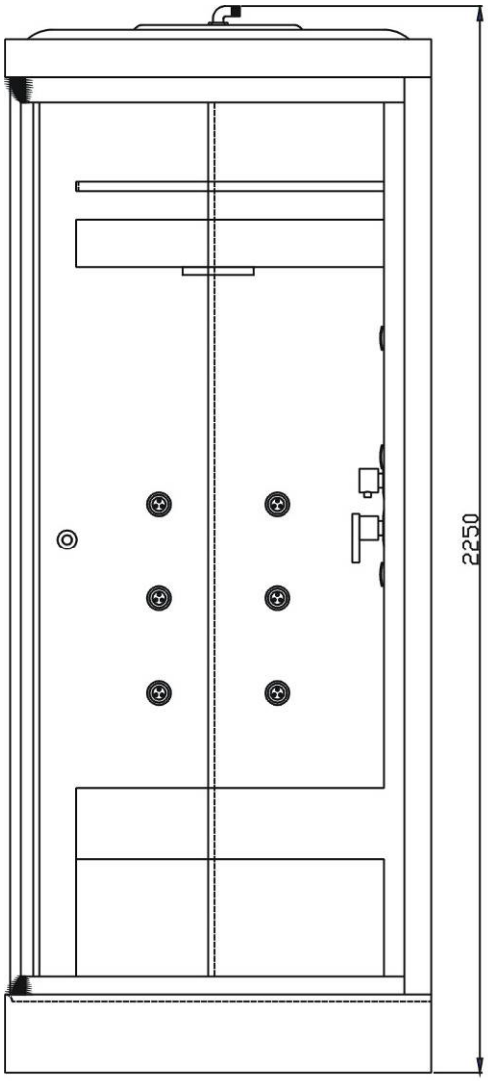
5 . Users with heart disease or high blood pressure shall be cautious to use this product.

6 . If you don't feel comfortable while using, turn off the power.

7 . The grounding wire needs to be attahced to the ground.



System	Electrical parameters			Dimension (mm/inch)		
	Voltage	Power	frequence	Length	Width	Heigth
Type	220V	3.5KW	50~60Hz	900/36	900/36	2160/85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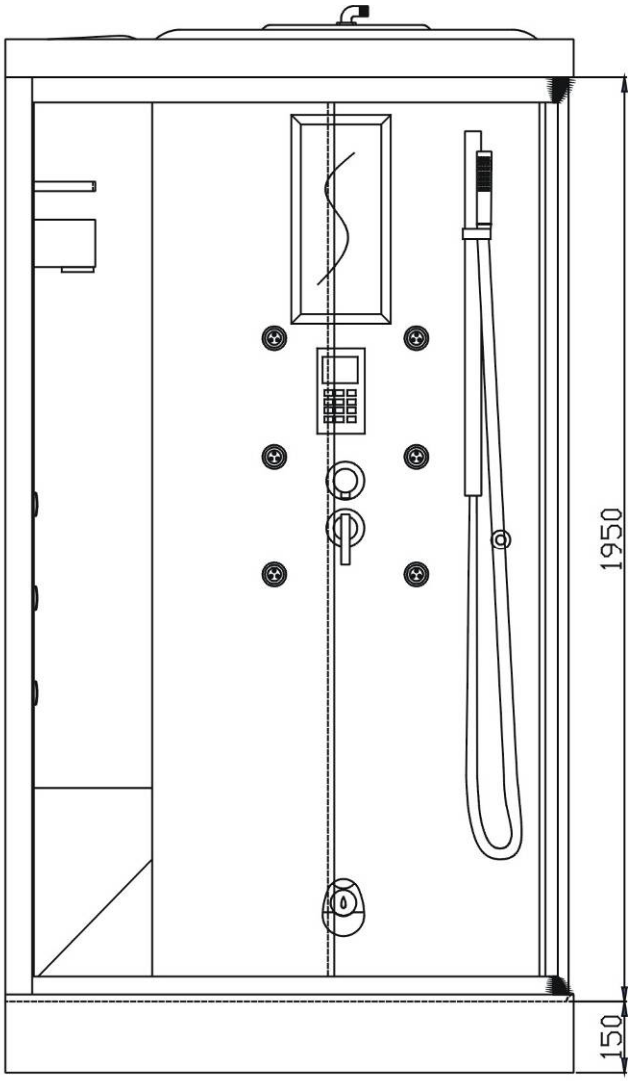
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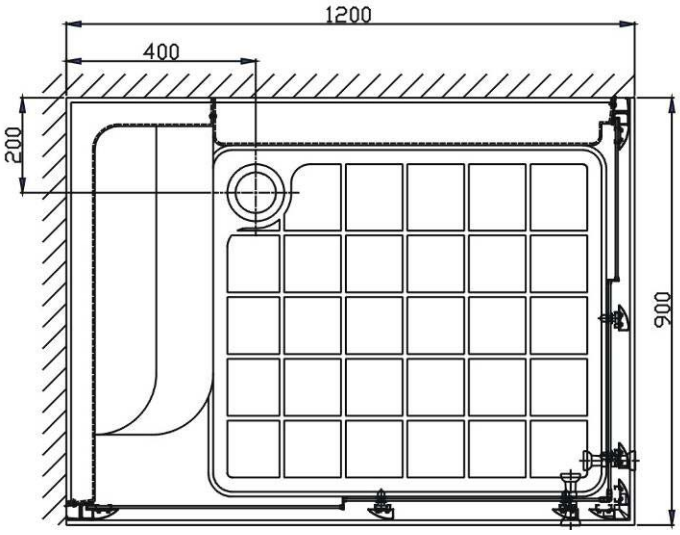
150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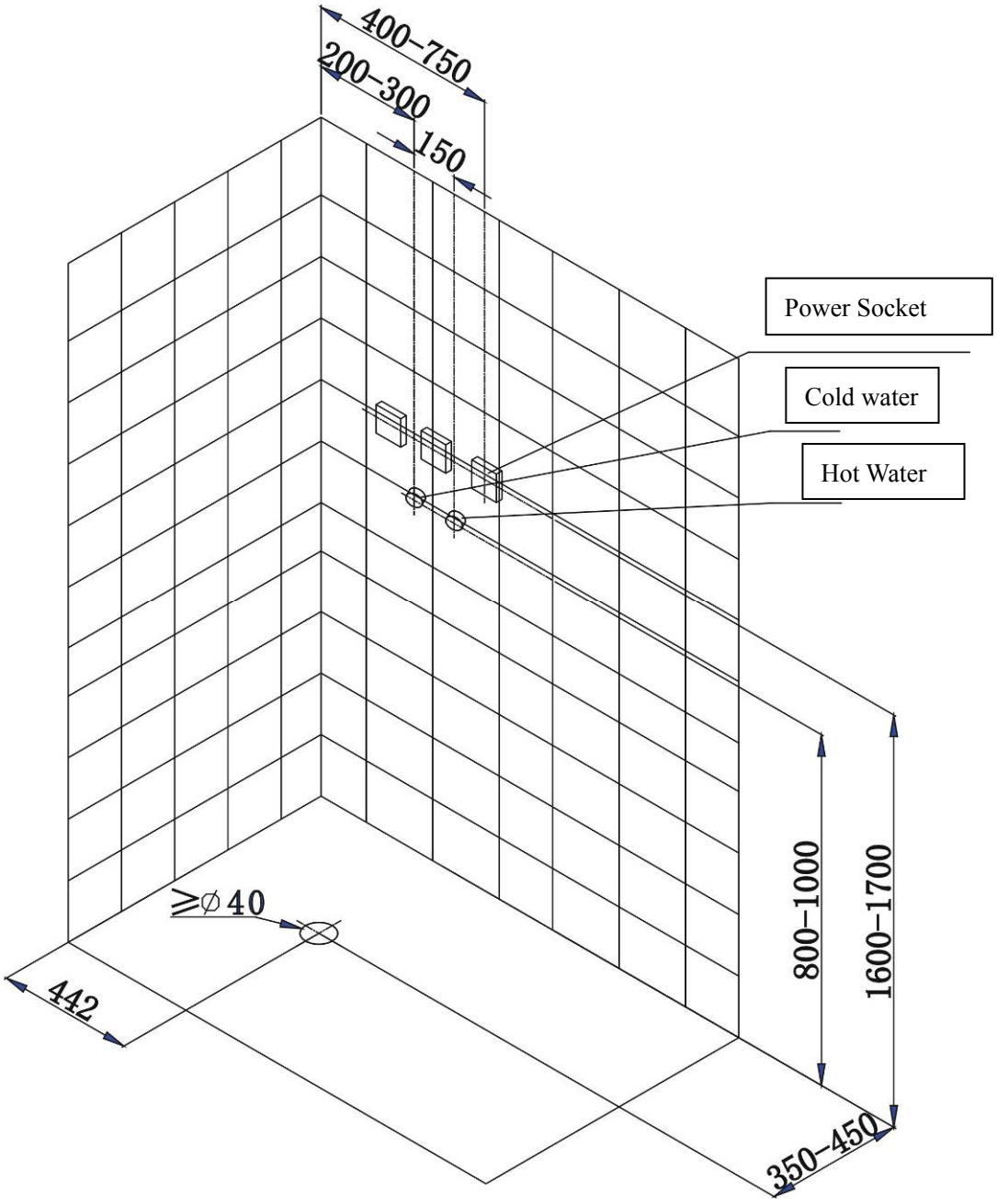
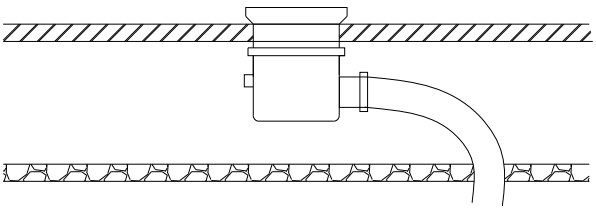
400
200
900



The installation method of the sewer pipe is as follows:



Model:PEARL

Installation Instruction：

A、Water supplier：Galvanized Cold water pipe and hot water pine each one piece。

B、Power requirement: Single-phase three-wire 220V power supply. Effective earthing wire should be provided.The section acreage for one single wire is more than 5.5 square mm. Cross section area of power wire for the machine is 1.5m(adjustable). The users can adjust the length of the wire within the suitable bound according to the surroundings of their bathroom.

C、Drainage: The diameter for the draining hole needs to be more than or equal to Ø40mm. The position of the draining hole is 300mm to 400mm away from the wall as we show on above figure.

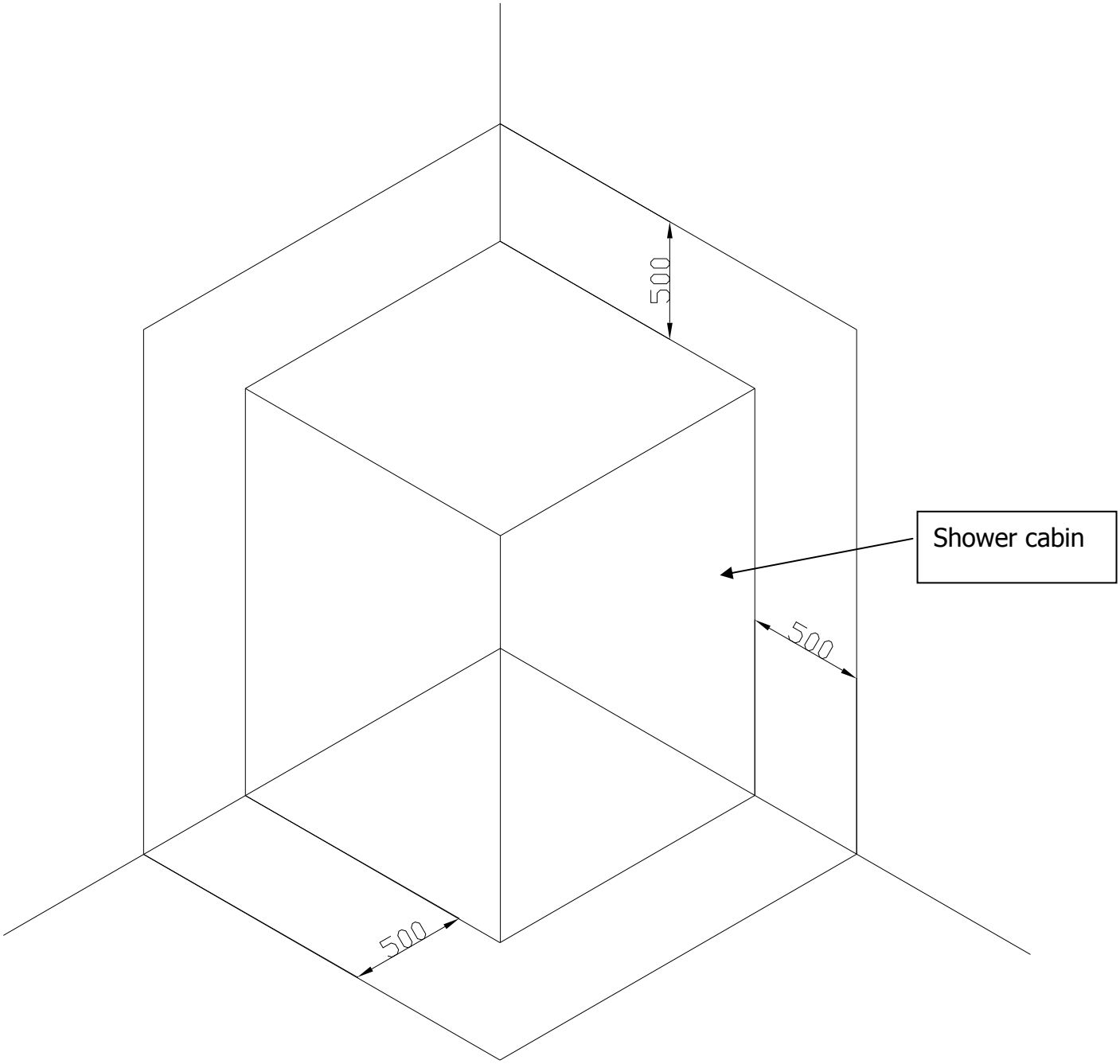
Attention：

（1）The distance from the ground to the ceiling has to be 10cm higher than the height of the steam room.

（2）The water pressure has to be more than 3kg/cm2. The pressure of the hot water and cold water should be balance. If the pressure is lower than 3kg/cm2, please assemble a pressurized pump at the out let of the water on the user’s cistern.

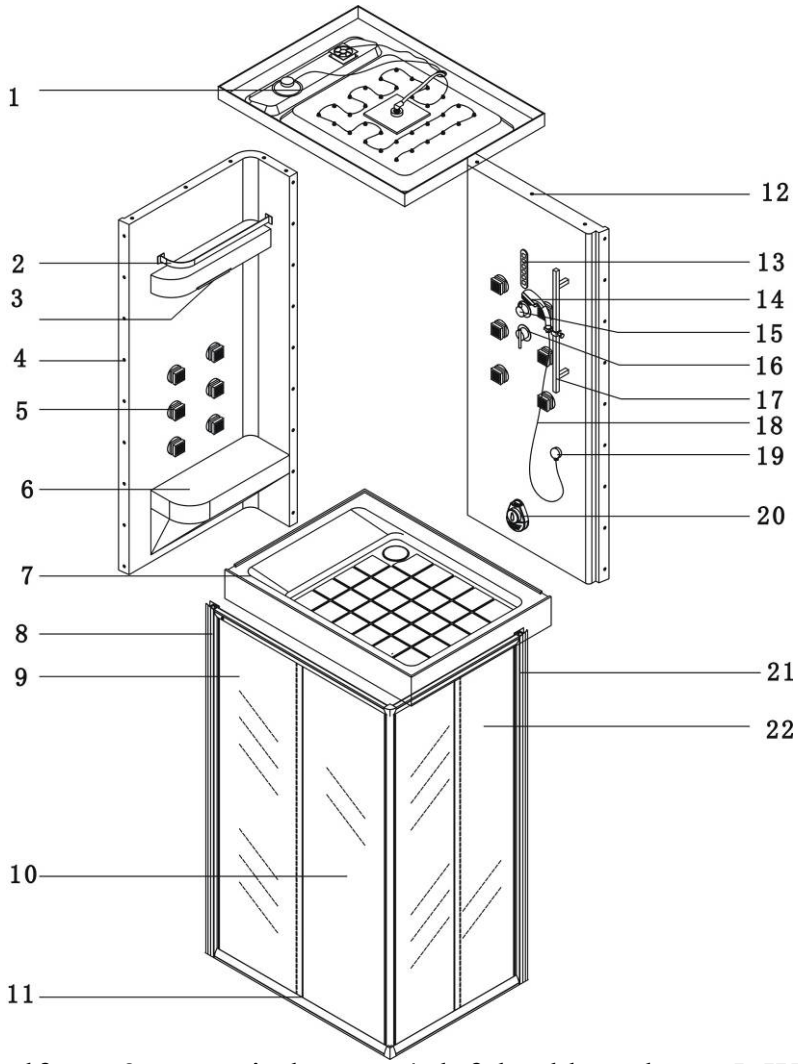
（3）Please assemble RCD (Residual Current Device) at the chief switch of the power supply.

（4）After installation, you need to leave a space more than 40cm around the steam room, for your maintenance sake.



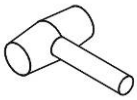
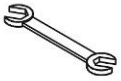
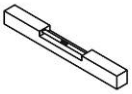
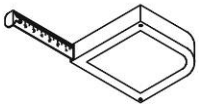
Attention :DO NOT place any object in the secure zone showed upon. Make sure that the distance from the ceiling to the top of the steam room is outside the secure zone. Besides, in order to move and maintain conveniently, you should place the steam room a certain distance from the wall.

1. When you receive the goods, check the package and the goods, especially the visible damage on the package. Once there is any damage, work it out with the carrier or the deliverer immediately. The manufacturer is not responsible for the problems during the shipment.
2. Ensure the required water and electrical condition at the scene of the installation.
3. The installation needs the cooperation of two people at least.
4. The containings in the package are as follows：



1. top cover 2. shelf 3. water in let 4. left backboard 5. Water jets 6. Seat 7. Shower tray 8. Aluminium profile 9. right fix glass 10. right glass door 11. Guide rail aluminium profile 12. right backboard 13. control panel 14. hand shower 15. divertor 16. faucet 17. sliding bar 18. shower hose 20. steam jet 21. Aluminium profile 22. Right fix glass

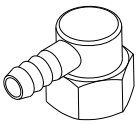
1. Needed tools：

Rubber hammer spanner Level gauge Tape measure Screw driver pencil

2. Needed fittings:

a ST4X16

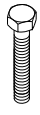


h elbow

b ST4X20

c ST4X30

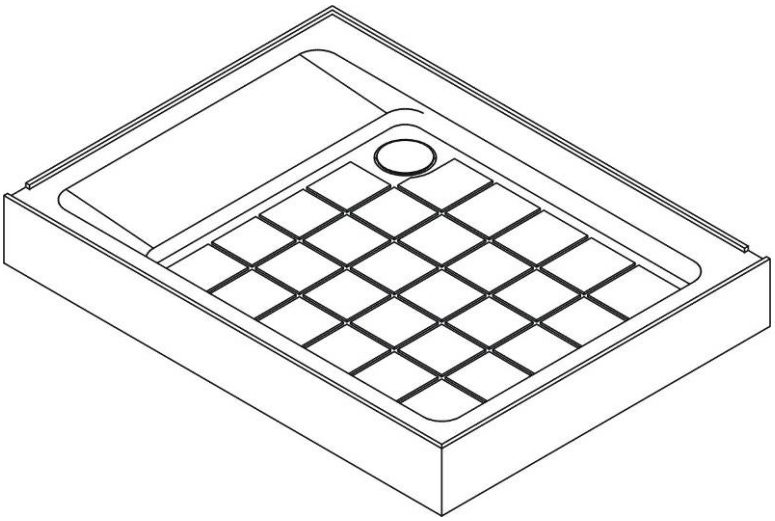
d1



d M6X25

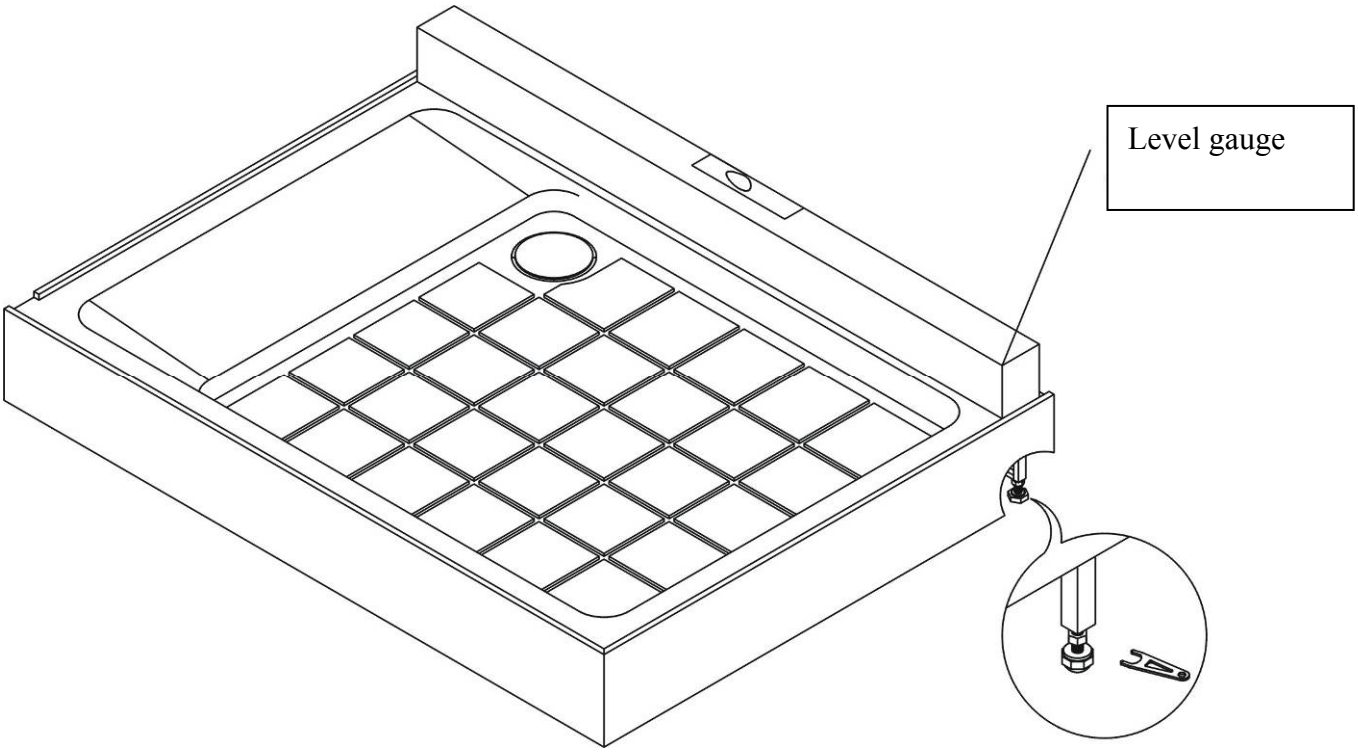
g Hose clamp

1.



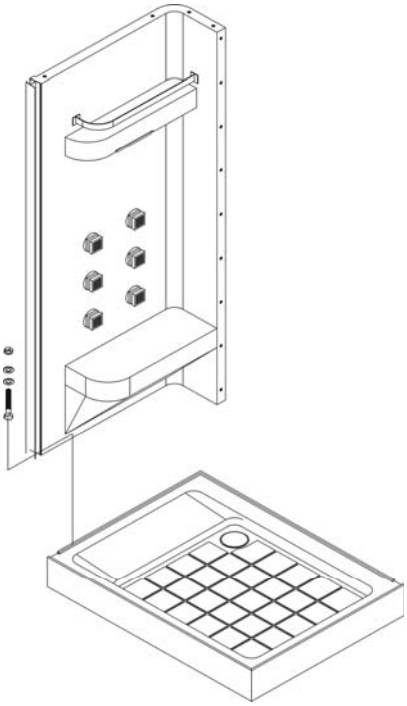
Place the shower tray to the installation zone.

2.



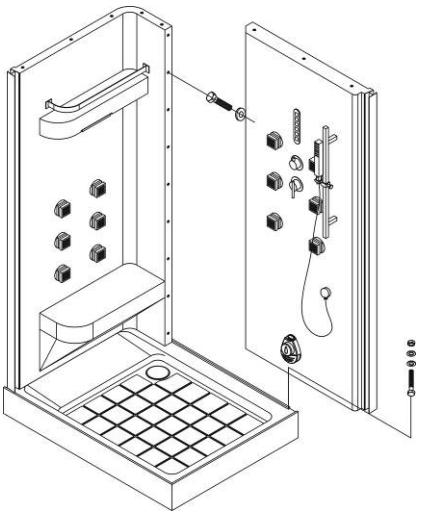
Move the shower stray 400-600 mm out of the original position, adjust the ground screw.Use level gauge to check if the bottom tray is level.

3.



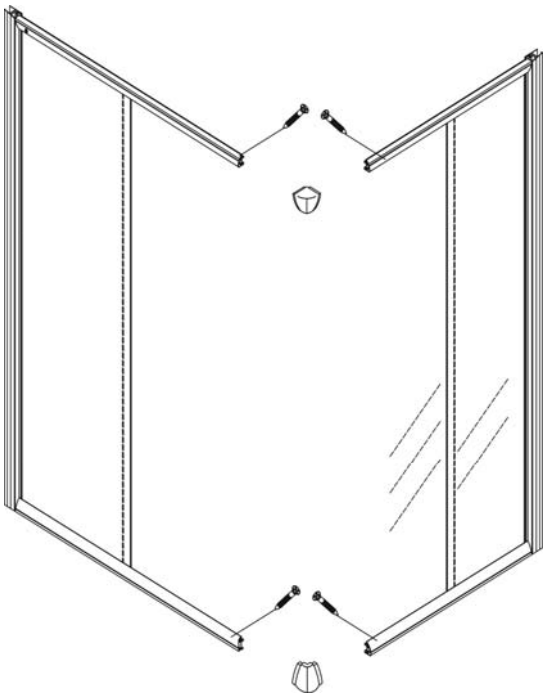
Uplift the left backboard onto the shower tray, align the mounting holes of the shower tray, and connect with M6X25 hexagonal bolts.

4.



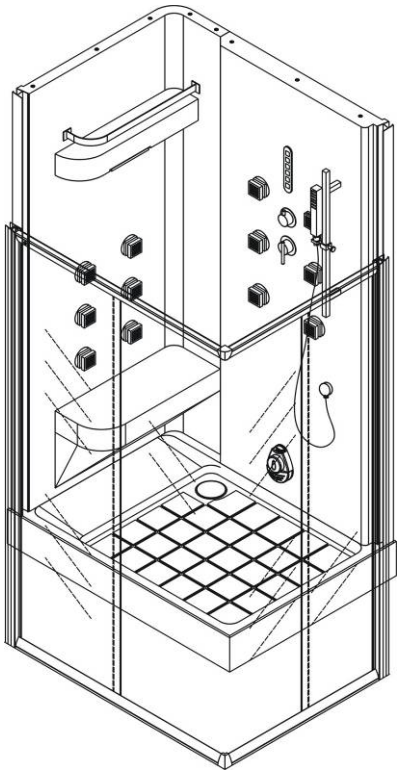
Uplift the right backboard onto the shower tray, align the mounting holes of the shower tray and the left backboard, and connect with M6X25 hexagonal bolts.

5.



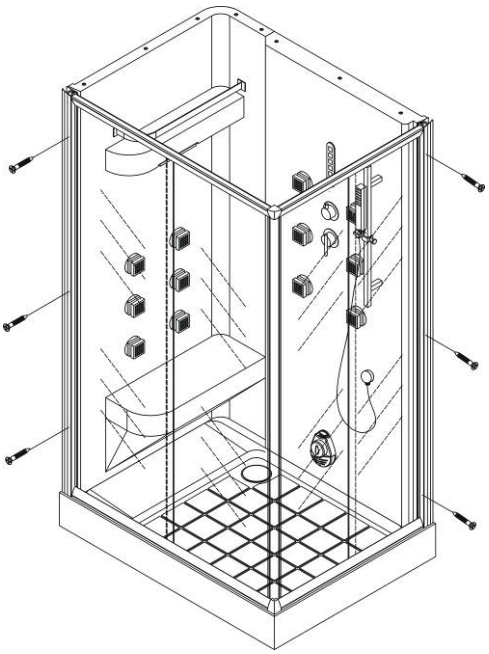
Connect the two sets of glass door frames together through glide joint, and fix with the ST4X16 self-tapping screws.

6.



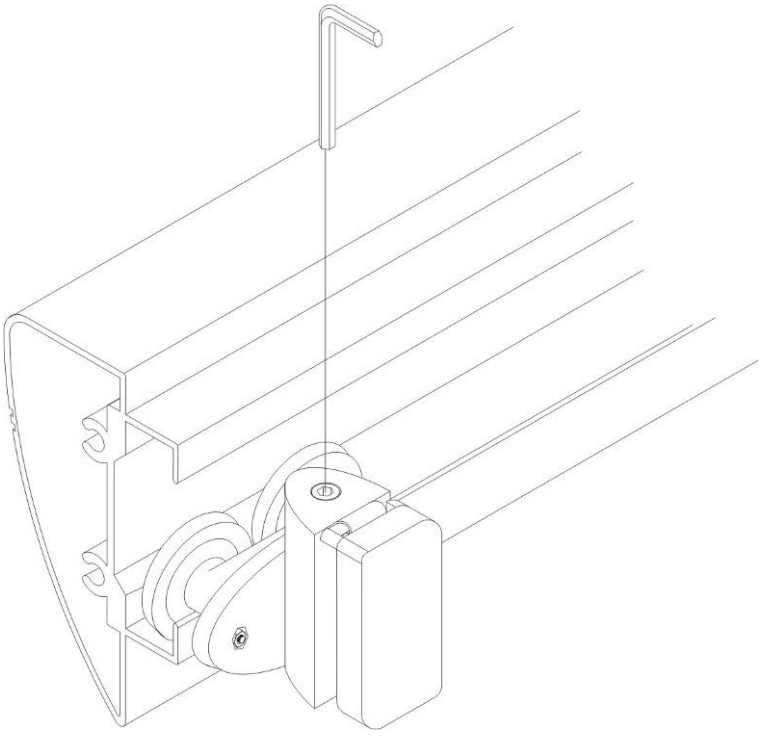
Uplift the well-assembled glass door onto the shower tray.

7.



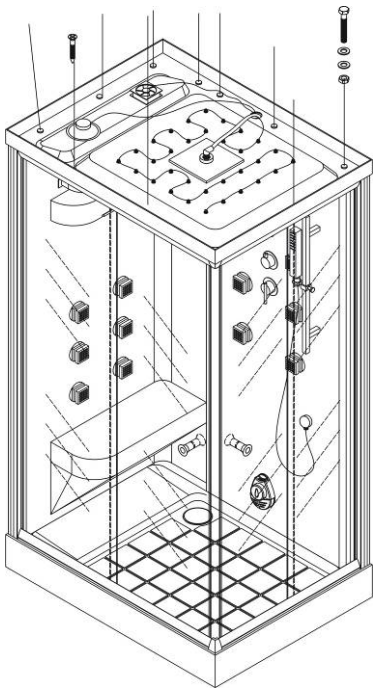
Insert the well-assembled glass door frames into the aluminum profiles of both sides of the backboard, and fasten the bottom guild rail and the shower tay with the ST4X20 self-tapping screws.

8.



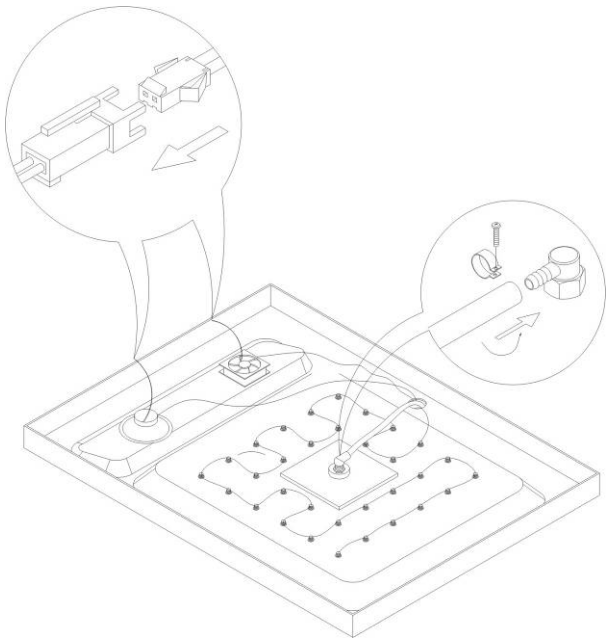
Adjust the roller on the movable door, to make the movable door closed seamlessly.

9.

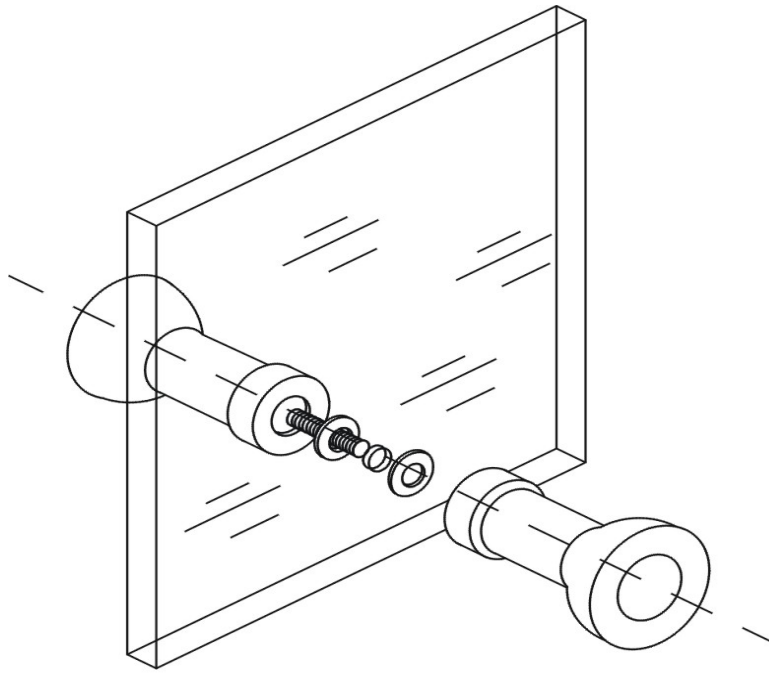


Uplift the top cover onto the shower cabin, fasten it with the two backboards through M6X20 hexagonal bolts, and connect it with the glass door frames with ST4X20 self-tapping screws.

10.



11.



Assemble the handle.

12. Please refer to the signs and numbers on the wires, and connect the wires sharing the same sign.
13. Connect the cold and hot water pipes, the red one is for hot water, while the blue is for cold. Connect it with the power and place the product in the proper position.
14. Connet the ground wire after checking and confirm the power of the house are accord with the national power standard.
15. Glue the connection with neutro silicon.

phenomino n	Malfuncti onal display	Failure possible reason	Solustions
Can not start	No display on the monitor	1.Power line unsuitably connected or no power supply. 2.Insufficient power 3.2A fuse damaged. 4. Current leakage protection switch damaged.	1.Correctly connect or wait for he electricity supply to resume. 2.The power must reach the required standard 3.Replace the 2A fuse. 4.Replace the current leakage protection switch.
Switch failure	Power off right after turned on	1.Leakage protection switch damped or damaged 2.short cut	1.replace the switch 2.recheck the circuit
Shut off spontaneou sly	Indicatin g light is on	1.inlet or outlet valve damaged 2.the drainage of the outlet valve got stuck	1.replace the inlet or outlet valve 2.clean out the draining pipes
	Indicatin g light is off	1.electronic components damaged 2.cable loosen	1.repair or replace the relevant component 2.reconnect the cables

No steam comes out		1.lack of water suply 2.water pressure too low 3.heating element in the steam generator is broke 4.no water coming in the steam generator 5.steam pipe is stuck or broke 6.haven't reached the required heating time 7.the indoor temperature is higher than the set temperature	1.wait for the water back to normal 2.install booster on the main water pipe 3.replace with a new one 4.check the inlet valve 5.remove the obstruction or replace the pipe 6.wait for a while 7.set a higher temperature or wait for it to cool down
Self protection		1.lack of water pressure 2.inlet or outlet valve got stuck 3. draining pipe got stuck 4. steam pipe got stuck	1.install booster 2.clean out the obstruction 3.same as above 4.clean the steam pipe
Suana fails to work		1.heating element damaged 2.circuit board or components damaged	1.replace with new one 2.same as above
Overheating		1.the set temperature is too high 2.temperature sensor fails to work	1.set a lower one 2.replace with new one

Steam cut off		1.Set time's up. 2.set temperature is too low 3.electronic component （heating element）damaged	1.reset the time 2.set a higher one（couldn't be lower then the temperature in the room） 3.repair or replace
Water leaks from the steam outlet		1.floater is out of control 2.the circuit in charge of checking the water level is out of control	1.check the floater 2.check the components in that circuit
No sound comes from the speaker	Monitor is working	1.no FM signal 2.mute 3.speaker damaged 4.antenna loosen	1.readjust the channel 2.increase vulume 3.replace a new one 4.reconnect it and adjust the position
	Monitor is not working	1.circuit or eletronic components damaged 2.cable loosen and not connected well	1.replace it 2.reconnect it or replace it

Attention:

Within the guarantee time, DO NOT break the seal on the electrical box and the steam generator on your own. DO NOT repair or replace the circuit on your own. If any problem occurred, please contact the local distributor or the manufacturer for after-sale service.

When it comes to daily cleaning, basically, liquid detergent and soft cloth should be involved. DO NOT EVER sterilize it by detergent with acetone and ammonia. DO NOT EVER use detergent with formic acid or formaldehyde.

2、To apply with some wax to polish it will bring you the glossy surface back.

3、The blotch on the surface can be wiped away by soft cloth with toothpaste.

4、The scale on the surface can be cleaned out by soft cloth with lemonade or heated vinegar.

5、To deal with slight scratchs or burn by cigarette, you shall rub it off by 1200 sand paper which needs to be softened by water first, then polish it by certain amount polishing paste.

6、After every 20 times of using the unit, we strongly suggest you to clean the steam generator. When you start to clean it, make some solution mixed with 1.5-1.7 litre of warm water and 5-10gram of citric acid. Pour the solution into the steam generator through the water inlet. Switch it on after 8 to 10 hours, wait for it to be discharged as gas.

7、When the water is too hard, we strongly suggest you to clean the whirlpool device twice a year. The way is as follows:

A、Fill 40□ hot water in the tub to the necessary water level (right to the level that can ensure to get the tub working).

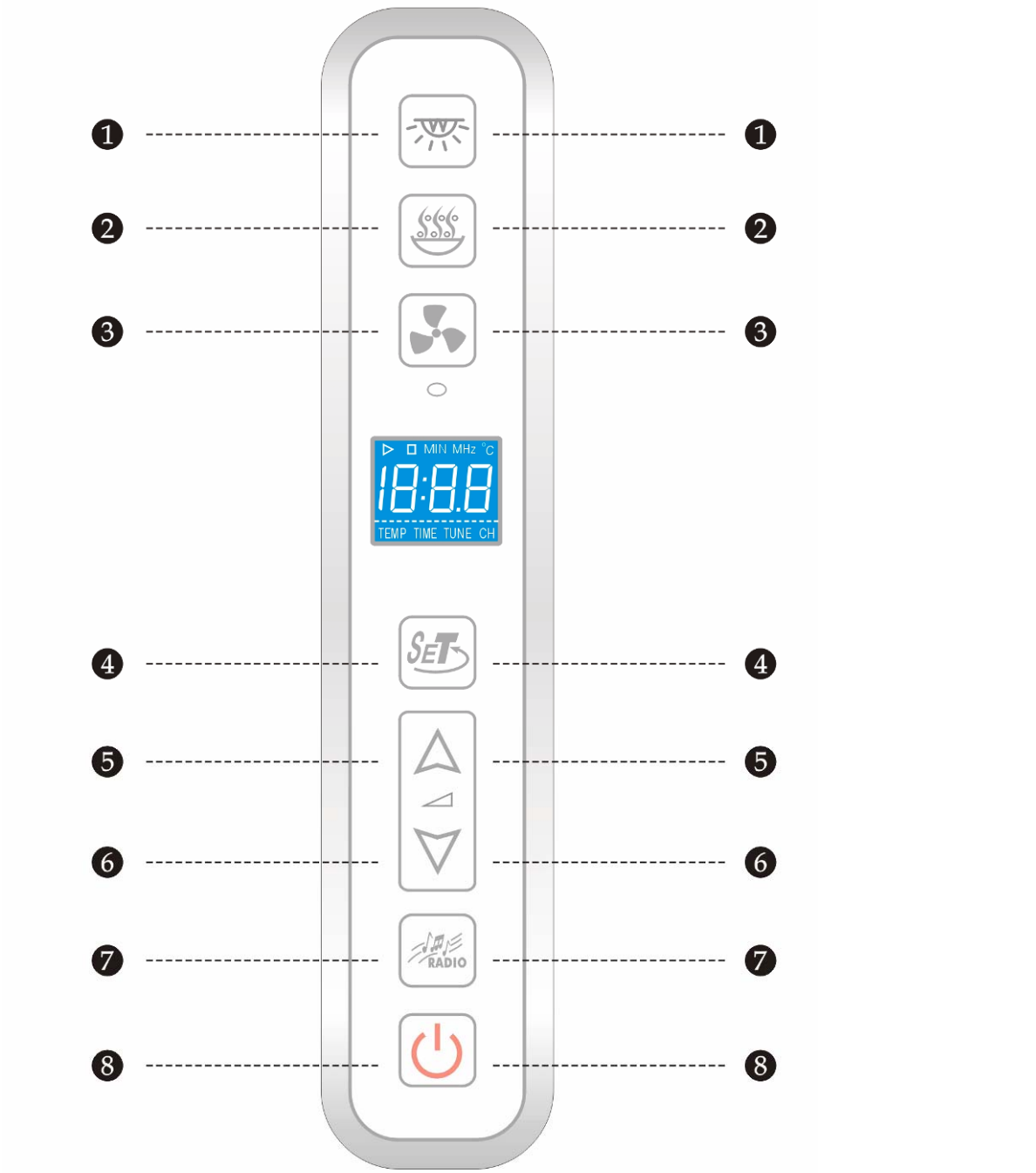
B、According to the proportion of mixing 2 gram of liquid detergent into 1 litre of water, put certain amount of detergent into the water, and switch the system on for 5mins.

C、Switch it off, drain out the water.

D、Fill cold water in the tub, switch on the system and keep it working for 3mins.

E、Switch it off, drain out the water and clean the tub.

I.



1 -------- Lamp Function Key

2 -------- Steam Function Key

3 -------- Fan Function Key

4 -------- Parameter Setting Function Key

5 -------- Parameter Setting + Key

6 -------- Parameter Setting – Key

7 -------- Radio Function Key

8 -------- ON/OFF Function Key

Usage Instructions:

1. This panel applies capacitor touch type keys, when selecting at the installation position, avoid to directly aim it at the sprayer. Otherwise, it may possibly cause mistaken operation or panel lock;
2. The positions of the functional keys on the panel are best touch range;
3. This panel applies water-sprinkling resistant treatment, when there is mistaken operation, the touch screen will stop working, and the panel will be locked; then please stop touching。The control panel will release the key and recover to work in short time.

II. Description on Functions

1. Water Pump Function
2. Lamp Function
3. Parameter Setting and Radio Function Adjustment
4. Air Pump Function
5. Radio Function

III. Operation

1. Turn ON/OFF

(1) Standby

After the system is turned off, it may enter into standby state and red indicator lights on.

(2) Turn on

□、Under standby state, hold the key on the panel for 1.5 seconds, backlight lamp lights on, start the system, and standby indicator lights off,

LCD display the environment temperature.

□、When LCD is on, touch the key on the panel to di

turn on/off the system.

□、Under system on state, if no function keys are pressed, the system will turn off 10 minutes later.

(3) Turn off

□、Under the system on state, touch the key on the panel to turn off all functions of the system, and the backlight may turn off 10 seconds later, standby indicator lights on during the course of turning of backlight lamp, turn on/off the system by pressing key on the panel.

□、The system will immediately drain out water and may turn off 3 minutes later.

2. Steam

Under system on state, touch the key on the panel to activate steam function, LCD display the default temperature 45℃, LCD flashes the TEMP, shown in Drawing

1, at this moment, touch the or on the panel to adjust the steam temperature : when TEMP flashes, touch key on the panel to display the default time of steam 45min, LCD flashes TIME, shown in Drawing 2, at this moment, touch the or on the panel to adjust the steam time; steam function is activated when there's full water, indicator flashes if there's water shortage, and steam function will be turned off; when steam function is on, touch key on the panel to turn off steam function.

Dr

Drawing 2

3. Lamp

Under system on state, touch the key on the panel, lamp indicator lights on; touch it again to turn off lamp, and lamp indicator lights off.

4. Radio

Under system on state, touch the key on the panel for the first time to activate radio function and radio indicator lights on, and the screen display the previous band with the volume the same as previous, press the key on the panel for the second time to turn radio off, and save the band and volume.

5. Parameter Setting and Radio Function Adjustment

Under radio on state, touch the key on the panel, the system will enter into following states by turns: radio band switch, frequency adjustment, air pump adjustment and volume adjustment.

(1) Frequency Switch: under frequency switch state screen flashes CH, shown in Drawing 3, switch the channel by pressing or key panel.

Drawing 3

(2) Frequency Adjustment: [1]. Under frequency adjustment state, screen flashes TUNE, shown in Drawing 4, adjust the channel by pressing or key on the panel. Hold the or key on the panel for 1 second to automatically search channel forwards, after finding one channel, it may automatically stop searching and play this channel; [2].

Save Channel: After finding one channel, hold key for 1 second to save the channel and display the frequency, for example: 10ch, touch the or key on the panel to continue searching, then touch the to save the channel at next code (it can save 10 channels at most);

Drawing 4

(3) Steam Temperature and Time Adjustment: Under steam temperature adjustment state, LCD display the default temperature 45℃, LCD flashes the TEMP, shown in Drawing 1, at this moment, touch the or on the panel to adjust the steam temperature (range: 25-60℃); when TEMP flashes, touch key on the panel to display the default time of steam 45min, LCD flashes TIME, shown in Drawing 2, at this moment, touch the or on the panel to adjust the steam time;

(4) Volume Adjustment: Under radio on state, if the system doesn't enter into parameter

(5) setting state or screen displays as Drawing 4, touch the ◁ or ▷ key on the panel to adjust the volume of radio.

Drawing 5

6. Fan

Under System on state, touch the key on the panel, fan indicator lights on and fan function is activated; touch it again to turn off fan function and fan indicator lights off.

IV. Technical Parameters:

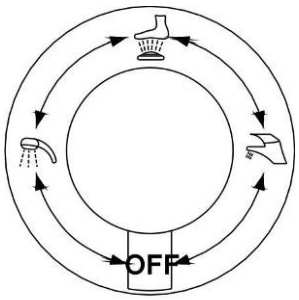
Work Conditions and Properties			
Rated Voltage	AC220V	Rated Frequency	50HZ
Rated Current	14.1A	Rated Power	3.1KW
Insulation Resistance	> 20MΩ	Waterproof Grade	1P×5

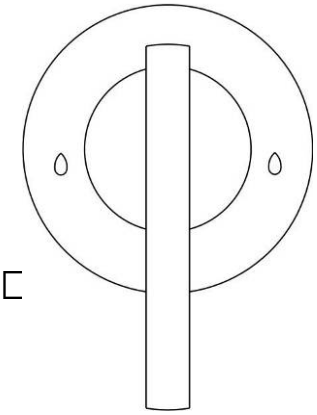
Loading Parameters				
Loading Variety	Rated Loading Voltage	Rated Loading Frequency	Rated Loading Power	Quantity
Steam	AC220V	50HZ	3KW	1
Lamp	AC12V	50HZ	22W	1
Fan	DC12V	—	4W	1
Solenoid Valve	DC12V	—	7W	2
Speaker	—	—	8Ω/10W	1

Size of Control Box	
Panel	Length * Width = 210*42(mm)
Electric Control Box	Length * Width * Height =275*218*92(mm)

Note: Fulfill the universal requirements and enterprise standard of home appliances and appliances of similar purposes.

V.Usage of Faucet:





You can turn it on by rotating the lever to clockwise direction, while you will turn it off to the other direction. The water flow is adjustable.

☐ Shower convertor

Switch the shower function, such as hand shower, foot massage or spout for the tub, according to the sign on the faucet.

☐ Water temperature adjustment：turn the cold and hot water faucet to left and right. It can also be turned on or off by turning up and down.

☐Turn the convertor to the sign for handheld shower when you need ；

Turn the convertor to the sign for overhead shower when you need ；

VI. Trouble Analysis for the fauctes

Fault	Reasons	Solution
Water temperature is unstable	1. Cold water end or hot water end is not harmonic 2. Water heater has low power 3. There's too much impurity, water inlet pipe or filter net was jammed with garbage which drops the water pressure	Remove dirt and garbage from water inlet pipe or filter net

Ⅶ.Trouble Shooting

Fault	Display	Reason	Solution
The system Can not be turned on.	No display	1. Power cord is not connected or power supply is not available 2. Power voltage is low 3. 2A fuse is damaged 4. Leakage protective switch is damaged	1.Correctly connect the power cord, wait for power supply 2.220V/50Hz power supply is required 3.Replace 2A fuse 4.Replace the leakage protective switch
Switch malfunction	System is stopped immediately after being turned on	1.Leakage protection switch is damp or damaged 2.Short circuit	1.Replace leakage protection switch 2.Check the circuit
Automatically turn off	Indicator lights on	1. Electronic element is damaged 2. Water drainage pipe is jammed	1. Replace the water inlet value or water drainage valve 2. Remove the jammed materials
	Indicator isn't on	1. Electronic element is damaged 2. Circuit is damaged	1. Repair or replace corresponding parts 2. Connect the circuit
Steam is not available		1. Water is not available 2. Water pressure is low 3. Steam generator heating tube is damaged 4. No water in steam generator 5. Steam delivery pipe is jammed or broken 6. It is heating 7. Temperature in the bathroom is higher than the set value	1. Wait for water supply, restart the system 2. Install water pump for tall buildings 3. Replace it 4. Check the water inlet solenoid valve 5. Remove jammed materials or replace the pipe 6. Wait to heat water 7. Automatically recover steam supply after temperature is lower than the set value (or increase the temperature)

Automatic protection		1. Low water pressure 2. Inlet and drainage pipe is jammed 3. Water drainage pipe and sewer is jammed 4. Steam pipe is jammed	1. Install pressure pump 2. Remove impurity 3. Dredge water drainage pipe and sewer 4. Dredge steam pipe

Fault	Display	Reason	Solution
Temperature is too high		1. Setting temperature is too high	1. Drop the temperature
		2. Temperature sensor is damaged	2. Replace the sensor
Cut off steam		1. System reaches the setting time	1. Adjust the time
		2. Setting temperature is too low	2. Rise the temperature (over room temperature)
		3. Electronic elements (heating pipe) is damaged	3. Replace or repair relative (heating pipe) elements
Dew at steam outlet		1. Floater is out of control	1. Check the floater
		2. Circuit for water level detection is out of control	2. Check the water level control parts
Speaker doesn't output sound	LCD displays	1. FM has not signal	1. Adjust the frequency and signal
		2. Vol/CD switch key is not pressed	2. Press Vol/CD key
		3. Speaker is damaged	3. Replace the speaker
		4. Antenna is loosen	4. Tighten the antenna and adjust the direction
	LCD doesn't display	1. Circuit board or element is damaged	1. Replace the circuit board or element
		2. Circuit is loosen or bad contact	2. Tighten or replace them

Note: Within the warranty period, please do not remove the seal on the micro computer control box and steam generator; Please do not repair or replace the circuit without permit; Please contact our local distributor or us for providing service if there's any fault.

Cleansing and Maintenance

1. Use ordinary liquid detergent and soft fabric for the daily clean of steam room. It is not allowed to clean the Steam room with acetone or ammonia. It is not allowed to use such disinfecting agents as formate and formaldehyde.
2. Polish the surface with polishing agent.
3. Wipe the stains from surface with toothpaste and soft fabric.
4. Remove water scald with lemon juice or vinegar after heating.
5. Grind the light scratch or burn on the surface with 1200# sand paper after dipping into water, then polish with polishing agent.
6. It is suggested to clean the steam generator after 20 times of heat circulation, dilute 5-10g citric acid with 1.5-1.7L warm water, pour it into steam generator with rubber pipe, plug-in the steam generator and press the heating key 8-12 hours later to evaporate the detergent.
7. When the hardness of water is very high, it is suggested to clean the water force massage device according to following method twice a year.

A. Pour 40℃ water into the bathtub until it reaches the lowest water level.

B. Add into liquid detergent at 2g/L water, start the water force massage device and make it work for about 5 minutes.

C. Stop the water pump and drain out water.

Special Cautions:

1. The user's power supply must be up to national SAFETY STANDARDS, and the voltage and frequency of the power must be in accordance with the product rated parameters as shown on the machine nameplate. Special attention should be paid to see that electrical leakage protection switch is installed and the earthing is checked to be effective.
2. The power supply to the Steam Room should be fixed and with permanent wiring, and the power wire should be with 3 cores, each with not less than 2.5 square millimeter (i.e. 3*2.5mm) section area.
3. In newly built house, water should go through the piping first to bring away the small materials inside the pipe such as sands, stones, wires, strings, etc.
4. Cut off water and power supply after using each time.